

ITM and CNL Sign Memorandum of Understanding to Pursue Global Development and Production of Rare Medical Radioisotope, Actinium-225

Garching/Munich, Germany and Chalk River, Ontario, Canada – October 18, 2021 – [ITM Isotope Technologies Munich SE](#), a leading radiopharmaceutical biotech company, and [Canadian Nuclear Laboratories](#) (CNL), Canada’s premier nuclear science and technology organization, today announced that the companies have signed a Memorandum of Understanding (MoU) to explore the development and industrial-scale production of Actinium-225, an extremely rare alpha-emitting radioisotope with heightened potential in precision oncology. Under the terms of the agreement, the organizations will collaborate on the development, manufacturing, and distribution pathways for the medical radioisotope. Further details of the agreement have not been disclosed.

Targeted Alpha Therapy (TAT) has been rapidly gaining growing interest from the scientific and medical community. Alpha-emitters, particularly Actinium-225, are in high demand for their ability to cause irreparable damage to cancer cells. Notably, Actinium-225 emits powerful, high-energy alpha particles with a short penetration range, which enables highly precise treatment of tumor cells, including hard-to-target micro metastases, with minimal impact to surrounding healthy tissue. In preclinical studies, TAT has shown remarkable results, destroying cancer cells by effectively breaking the bonds in their DNA. Actinium-225 can be labelled to a variety of peptide ligands or antibodies to specifically target cancer cells in a wide range of tumor indications.

As the current annual global production of Actinium-225 is miniscule, one of the biggest challenges in harnessing the full potential of the alpha-emitter is ensuring its supply. CNL and ITM have the expertise and infrastructure in place to work to sufficiently bypass the supply hurdle to develop and produce this coveted radioisotope with huge therapeutic potential.

“CNL is very excited to enter into this agreement with ITM, an industry leader that shares our ambition of bringing the next-generation of medical radioisotopes to the global market,” commented Joe McBrearty, CNL’s President and CEO. “It is also an exciting evolution of CNL’s work in the field of medical radioisotopes, and makes use of our capabilities in target development, radiochemistry, radioisotope analysis and by-product management. Working with ITM, we hope to leverage these capabilities to accelerate the development of this promising new isotope, and to establish a commercial pipeline for what we believe will be a ground-breaking new cancer treatment.”

“It is always a pleasure to work alongside another radiotherapeutic industry leader like CNL in the development of a radioisotope with the potential to address a high unmet need. We look forward to sharing our expertise in the global production and supply of the highest quality radioisotopes in our shared mission of exploring the otherwise untapped potential of Actinium-225, commonly referred to as the ‘rarest drug on earth’. We are eager to unveil the therapeutic value of this radioisotope which we believe has the potential to unlock revolutionary TAT treatments,” said Steffen Schuster, CEO of ITM.

ITM is a world leader in the development, production and global supply of radiotherapeutics and diagnostics, and maintains an evolving precision oncology pipeline. Coupled with CNL’s extensive scientific infrastructure and vast experience in developing and distributing medical radioisotopes, the companies are very well-positioned to produce and provide this highly sought-after radioisotope to the global industry.

Under the terms of the agreement, CNL will be responsible for the research and development as well as the production of Actinium-225. The company is already developing and producing Actinium-225 in research-scale quantities using Thorium-229 generators. ITM will be responsible for further processing Actinium-225 to Good Manufacturing Practices (GMP) standard and will subsequently have the primary responsibility for associated regulatory processes, marketing and sales of the product. CNL and ITM aim to leverage their capabilities towards establishing a continuous commercial supply of GMP-grade Actinium-225 for the global market. Both parties are working towards signing a more formal agreement in the form of a Collaborative Venture.

About ITM Isotope Technologies Munich SE

ITM, a privately held radiopharmaceutical biotech company founded in 2004, is dedicated to providing the most precise cancer radiotherapeutics and diagnostics to meet the needs of patients, clinicians and our partners through excellence in development, production and global supply. With patient benefit as the driving principle for all we do, ITM is advancing a broad pipeline combining its high-quality radioisotopes with targeting molecules to develop precision oncology treatments. ITM is leveraging its leadership and nearly two decades of radioisotope expertise combined with its worldwide network to enable nuclear medicine to reach its full potential for helping patients live longer and better.

For more information, please visit www.itm-radiopharma.com.

About CNL

Canadian Nuclear Laboratories is a world leader in nuclear science and technology offering unique capabilities and solutions across a wide range of industries. Actively involved with industry-driven research and development in nuclear, transportation, clean technology, energy, defence, security and life sciences, we provide solutions to keep these sectors competitive internationally.

With ongoing investments in new facilities and a focused mandate, Canadian Nuclear Laboratories is well positioned for the future. A new performance standard reinforced with a strong safety culture underscores every activity.

For more information on the complete range of Canadian Nuclear Laboratories services, please visit www.cnl.ca or contact communications@cnl.ca.

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